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SGR Second Annual Survey

Non-Profit Salaries: The Pay is Decent at the Top

Herewith SGR's Annual Selective Survey of Non-Profit Senior Salaries and Related Financial Matters, a feature whose debut last December 15 brought a new peak of requests for additional copies, along with numerous inquiries on how to get such data. Simple: All organizations granted tax exemptions under Section 501(c) of the Internal Revenue Code must file IRS Form 990, which, by law enacted in 1987, must be made available at the organization's main office upon request by anyone, without quibble or delay. The data in the Form 990s are often a year or more old because many organizations routinely receive extensions for filing. But for a look at the financial affairs of the nation's large, powerful, and little-accountable tax-exempt sector, the 990s are a priceless window.

National Academy of Sciences (NAS). Fount of innumerable dour reports on the sufficiency of federal funds for research, the NAS, chartered in 1863 by Congress as adviser to the federal government, has experienced a healthy expansion in its own share of federal funds. Its latest Form 990, for the NAS fiscal year ending June 30, 1988 (covering tax year 1987, filed January 13, 1989), shows that total revenues—from all sources—were $153,433,197. Of that amount, "government grants" received by the NAS amounted to $111,749,679, an increase of $17.8 million from the previous year, when total revenues stood at $93,971,521. During the same period, "direct public support"—gifts, publication sales, etc.—rose only a trifle, from $29.1 million to $31.2 million.

Healthy growth was reflected in salaries and benefits for senior officials of the NAS and its subsidiaries, the National Academy of Engineering (NAE) and the Institute of Medicine (IOM).

NAS President Frank Press received compensation of $205,811, an increase of $15,842 from the previous year. The benefits listed for Press rose from $29,612 to $31,426. The NAS Form 990 noted that Press has use of a "chauffeur-driven automobile primarily for business purposes. Included in the value of his compensation," it added, "is the value of his personal use of that automobile." As in the previous year, no reference was made to the Watergate apartment that the NAS provides Press. An Academy spokeswoman told SGR last year that Press pays for "personal use" of the apartment.

The NAS Form 990 reports the following salaries and benefits for other senior officials of the organization in tax year 1987; comparable data for 1986 are in brackets.

Robert M. White, President, National Academy of Engineering: $205,811, plus $16,409 in benefits. [$193,366, $15,406]

Samuel O. Thier, President, Institute of Medicine: $183,046, plus $25,222 in benefits. [$167,754, $21,021]

Philip Smith, Executive Officer: $114,652, plus $16,826 in benefits. [$103,385, $12,387]

James R. Wright, General Counsel: $107,443, plus $11,264 in benefits. [$89,615, $10,441]

David Williams, Comptroller: $98,484, plus $14,794 in benefits. [$92,068, $13,873]

American Chemical Society (ACS). The ACS return, for tax year 1988 (filed November 15, 1989), shows an organization with hefty revenues, but little growth, from numerous

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In Brief

The *Chicago Tribune's* booklength debunkment of Robert Gallo's role in AIDS research (SGR December 1: "Gallo's Claims in AIDS Research Assailed Anew") has aroused the interest of Rep. John Dingell (D-Mich.), best known in scientific circles for his clashes with Nobelist David Baltimore. In a letter December 5 to Acting NIH Director William Raub, Dingell said the *Tribune* report, by 1981 Pulitzer Prize winner John Crewdson, raises "disturbing" questions of scientific integrity and demanded that NIH investigate Gallo's claimed role in identifying the AIDS virus.

Following another good year for academic pork-barrel politics on Capitol Hill, Senator Terry Sanford (D-NC) has been quietly assembling a group of legislators and university presidents to explore the issue of federal funds for university facilities. Still unnamed, the Sanford group is chaired by Joe B. Wyatt, Chancellor of Vanderbilt University, with Sanford and Rep. George Brown (D-Calif.) as Co-Chairmen.

The leading tracker of "earmarked" appropriations, James D. Savage, an analyst in the Office of the President of the University of California, reports in a recent paper that from fiscal 1980 to 1989, "more than $900 million has been earmarked for at least 300 academic facility and research projects." Contrary to the common perception of earmarking as a boon for poorer states, he reports, it mainly "helps the rich states get richer."

Now that C. Everett Koop has been forced out from his long-embattled tenure as Surgeon General, the National Academy of Sciences plans to honor him with its 1990 Public Welfare Medal, thus recalling Samuel Johnson's words: "Is not a patron, my Lord, one who looks with unconcern on a man struggling for life in the water, and, when he has reached ground, encumbers him with help?"

. . .*Science* Editor Got $102,050 for 20-Hour Week

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publishing activities (22 journals and 550 book titles) plus ownership of *Chemical Abstracts*, one of the world's leading scientific data bases. Total revenues reported for 1988 were $180,403,487, an increase of only $7 million over the previous year, which has inspired introspection at the ACS about its financial state. The ACS returns provide more details about benefits and expenses than most other organizations do, part of the wide range of variations in the way the tax-exempts choose to fill out the Form 990.

The highest paid ACS official in 1988 was John K. Crum, Executive Director, who received a salary of $170,500, an increase of $10,400 over the previous year. Also reported for Crum in the 1988 return were $5139 under the heading "loan or credit"; $9939 in "benefits, goods, services or facilities," and $15,083 in "compensation or reimbursement of expenses."

Other salaries and benefits reported by the ACS in returns for 1988 and 1987 (in brackets):

Ronald Wigington, Division Director: $131,697, plus $1913 loan or credit; $7677 benefits, goods, services or facilities, and $11,650, compensation or reimbursement of expenses. [$117,308, $1350, $6217, and $9651]

Ronald Dunn, Division Director: $112,000, plus $3572 loan or credit; $6529 benefits, goods, services, or facilities, and $9908, compensation or reimbursement of expenses. [$97,116, $296, $5147, $7990]

Nick Farmer, Division Director: $105,095, plus $320 loan or credit; $6126 benefits, goods, services, or facilities, and $9297 compensation or reimbursement of expenses. [$99,069, $290, $5250, $8150]

Michael Bowen, Division Director: $103,400, plus $546 loan or credit; $6027 benefits, goods, services, or facilities, and $9197 compensation or reimbursement of expenses. [$97,200, $503, $5151, $7997]

Justin Collat, Division Director: $102,000, plus $2162 loan or credit; $5946 benefits, goods, services, or facilities, and $9023 compensation or reimbursement of expenses. [$97,500, $1305, $5167, $8021]

Rodney Hader, Secretary: $123,270, plus $4178 loan or credit; $7185 benefits, goods, services, or facilities, and $10,905 compensation or reimbursement of expenses. [$119,423, $2106, $6329, $9825]

Brian Bernstein, Treasurer: $85,846, plus $130 loan or credit; $5004 benefits, goods, services, or facilities, and $7394 compensation or reimbursement of expenses. [$78,154, $116, $4142, $6430]

American Association for the Advancement of Science (AAAS). The AAAS has lately hunkered down to grapple with deficits resulting from plateaued membership rolls (stuck at around 130,000 for over a decade) and slow growth in advertising in its prime property, the weekly *Science*, the nation's leading general scientific publication. The most recent tax return, for 1988, reports total revenues of $31,620,000, a drop of $137,000 from the previous year. In terms of revenues versus expenses, the AAAS reported an excess (what's called profit in the taxable sector) of merely $33,761 in 1988. In 1987, the excess stood at $2,852,441.

The top salary, $146,800 plus $29,498 in benefits, was reported for the then-Executive Officer, Alvin W. Trivelpiece, who left at the end of 1988 to become head of the Oak Ridge National Laboratory. His successor, Richard Nicholson, formerly of the National Science Foundation, didn't arrive in time for inclusion in the return.

Others listed in the 1988 AAAS return, with 1987 in brackets:

J. Thomas Ratchford, Associate Executive Officer (who left the AAAS last month to become an Associate Director of the White House Office of Science and Technology Policy): $98,422, plus $22,100 in benefits. [$85,500, plus $20,666—a small revision of amounts filed in the original AAAS return for 1987]

Daniel E. Koshland Jr., Editor, *Science*: $102,050, no benefits. [$84,796, $18,010] The AAAS 1988 return states Koshland is employed 20 hours per week, a revision of the 1987 tax-return entry, which listed him at 40 hours per week. The latter figure produced some confusion, since at the time of Koshland's appointment to the editorship in 1985, the AAAS announced he would be "devoting about half time" to the job, with the balance spent at UC Berkeley, where he is a professor of biochemistry and principal investigator on a $1.8 million, five-year NIH grant. An inquiry last year from SGR to the AAAS brought a spokeswoman's response stating that "it is probably conservative to estimate that he spends an average of 40 hours a week in his responsibilities as editor of *Science*." Nonetheless, the 1988 return states "20" under "average hours per week devoted to position," and in the 1987 return the typed-in "40" has been pencilled over and replaced with "20."

James F. Rutherford, Chief Education Officer: $88,438, plus $20,780 in benefits. [$81,000, $20,126]

Carl B. Amthor, Chief Financial Officer: $87,296, plus $20,384. [not listed in 1987]

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. . . In Lobby Job, Ex-Rep. Fuqua Drew $221,377

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Arthur B. Herschman, Publications Officer: $74,714, plus $15,600. [$69,046, $14,586]

Aerospace Industries Association (AIA). Notable for its heavyweight politicking, the AIA, comprising 54 aerospace firms, is headed by a former Democratic Florida Congressman, Don Fuqua. For many years, he was situated, if only passively, in the center of science politics as Chairman of what was then called the House Science and Space Committee. Voluntarily stepping down from Congress upon the completion of his 14th term in 1986, Fuqua went directly to the helm of the AIA, whose legislative interests were heavily concentrated in his old House Committee. As President and General Manager of the AIA, Fuqua received a salary of $221,377, plus benefits of $4433, in 1988, the year of the AIA's latest return. In 1987, his salary was $202,021, with benefits of $3573. Those are middling figures on the major-league lobbying scene, but a good step upward from the current Congressional wage of $89,500.

The only other salary listing for the AIA was for George E. Copsey, Secretary, $65,000, plus $9015 in benefits, in 1988; $57,888 and $6504 in 1987.

American Psychological Association (APS). After splitting with some of its warring factions and selling off *Psychology Today* (net proceeds: $6,257,541) and several choice pieces of Washington-area real estate (for a total of $24.5 million) the APA has a healthy balance sheet. Its latest Form 990, for calendar year 1988, shows total revenues of $23,866,490, and expenses of $17,679,317.

The top salary was paid to Bryant L. Welch, Executive Director, who received $131,427, plus $17,969 in benefits. In 1987, he was listed for $124,420, and no benefits.

The recent high turnover in APA senior staff is reflected in the many names that appear in the 1987 or 1988 tax returns, but not in both. Listed in the APA's 1988 return:

Gary R. Vandenbos, Executive Director: $95,041, plus $12,716 in benefits.

James M. Jones, Executive Director: $88,883, plus $10,186 in benefits.

Vivian Makosky, Executive Director: $78,401, plus $11,739 in benefits.

Alan G. Kraut, Executive Director, $73,263, plus $11,380 in benefits.

Listed in the APA's 1987 return:

Jerry Firestone, Director of Advertising: $106,650, no benefits listed.

Patricia Horn, Editor: $80,685, no benefits listed.

James Causey, Publisher: $99,599, no benefits listed.

Les Grafman, Director/Marketing, $82,856, no benefits listed.

Howard Hughes Medical Institute (HHMI). The senior salary scale at the colossus of the philanthropies confirms that it is frequently better to give than to receive. The most recent return, for tax year 1987, is for the HHMI fiscal year ending August 31, 1987, when assets stood at $4.9 billion and dividends and interest amounted to $238,895,747.

The 1987 return shows that Purnell W. Choppin, HHMI President and Chief Executive, received $300,000 in salary, plus $51,606 in benefits. He was topped by the Vice President and Chief Investment Officer, Graham O. Harrison, who received $350,000 in salary and $60,313 in benefits. (The tax-law revision does not require public availability of earlier returns, and HHMI, in contrast to other non-profits, stood on its rights.)

Compensation listed for several HHMI star investigators was considerably lower, though it is likely they also have other sources of professional income. Technically employes of HHMI, they are based at medical schools, where they hold faculty appointments. Listed in the 1987 return:

Bernardo Nadal-Ginard, Harvard Medical School, identified by HHMI as "investigator, fulltime," $177,000 in salary, plus $36,449 in benefits.

Eric R. Kandel, of Columbia University College of Physicians and Surgeons, "senior investigator, fulltime," $170,000 in salary, plus $39,689 in benefits.

C. Thomas Caskey, Baylor College of Medicine, HHMI "investigator, full time," $165,300 in salary, plus $38,713 in benefits.

Philip Leder, Harvard Medical School, "senior investigator, full time," $163,640 in salary, plus $34,959 in benefits. A note with Leder's entry states that HHMI paid "an additional $66,231 for compensation and benefits through Harvard Medical School."

Other listings for HHMI officers and senior administrative staff:

George W. Thorn, Chairman of the Board, "part-time as required": $92,000, plus $33,399 in benefits.

Lillian H. Blucher, Managing Director, Investments: $231,445 in salary, plus $41,191 in benefits.

George F. Cahill Jr., Vice President for Scientific Training and Development: $197,000, plus $50,505 in benefits.

W. Maxwell Cowan, Vice President and Chief Scientific Officer: $150,000, plus $31,375 in benefits.

Joseph G. Perpich, Vice President for Grants and Special Programs: $156,000, plus $32,473 in benefits.

William T. Quillen, Vice President and General Counsel: $201,000, plus $40,747 in benefits.

Robert C. White, Vice President and Chief Financial Officer: $212,000, plus $49,833 in benefits.

Kenneth E. Wright, Executive Director of Research Administration: $150,000, plus $42,523 in benefits.

Mark W. Smith, Controller: $104,500, plus $24,359 in benefits.

Association of American Medical Colleges (AAMC). Washington lobby for the nation's medical schools, the AAMC advised SGR that a follow-up has not yet been filed for the Form 990 reported here last year, which was for the

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Q&A: The Pressures in the NIH Granting System

The National Institutes of Health has experienced robust financial growth over the past decade, with its budget rising from $3 billion in 1979 to some $7.5 billion in the current fiscal year. Nonetheless, the biomedical-research community is ringing with unusually strident complaints of severe financial hardship for the conduct of research and development of young scientists. For an expert account of the actual workings of NIH's complex granting system, SGR spoke on December 11 with a veteran administrator at the center of the process, Donald H. Luecke, Deputy Director of the NIH Division of Research Grants, which runs the peer-review system through which all grant applications must pass. Following is the text, transcribed and edited by SGR.

SGR. Researchers are complaining perhaps more than ever about the difficulty of getting NIH grants.

Luecke. It's true that many technically superior applications are not being funded. But although things are not good, they're not as bad as some seem to think. Part of the problem is that people have reported that the NIH is paying only 11 or 13 percent of the applications that have been approved. I think it useful to talk about the new percentile system that's used here for initial review, as compared to the percentage of grant applications which are actually funded, because there's a difference. We started in fiscal '89 with an NIH-wide move toward percentiling. That was because the median raw priority scores that were being voted by the study sections, which do the initial reviews, had moved into the 150 range. That's on the NIH scale, on which 100 is nearly perfect and 500 is barely acceptable.

SGR. Was a grade inflation going on in response to funding difficulties?

Luecke. Absolutely, but many people also feel that the quality of the applications had improved considerably. There were also a number of amended applications, and we know that they improve from being amended. So we now have a percentile system. This effectively rank-orders within a given study section the applications from the very best to the very worst. The very best ones in our NIH nomenclature would have a very low numbered percentile. Something that's in the first percentile would do very, very well. Something beyond the 50th percentile would probably not be funded.

Now, for example, if the National Cancer Institute had only two applications going to a particular study section and both of them fared very well, then the Cancer Institute would be paying 100 percent of the applications that came from that study section. In most cases, our study sections review applications for multiple institutes, so it's a rare situation where the study section actually reviews applications for only a single institute. So you have to be careful about drawing conclusions. If neither of those applications from the Cancer Institute did very well, they would fund zero percent from that particular study section. Considering the fact that all of the institutes have applications going to multiple study sections—we have essentially 100 study sections here, plus additional ones in the institutes—it's very hard to say what paying to the 13th percentile really means. My guess is that for this current year, we probably will be paying something in the order of 25 percent of the applications.

SGR. That's historically very low.

Luecke. Yes, it is. I think our whole peer-review system was designed to work rather well when we were paying about 50 percent of the applications. Certainly, we sort the better half from the poorer half very nicely. But we haven't been paying 50 percent for some time now.

SGR. What has happened to the sheer number of applications coming in—good and bad?

Luecke. The overall trend had been constantly upward. In fiscal 1989, we had about 35,000 applications coming into the Division of Research Grants. That includes all research grant applications that are coming to the Public Health Service. The largest part come to the NIH. About 4000-4500 go to our sister agency, ADAMHA (Alcohol, Drug Abuse, and Mental Health Administration). We reviewed here in the Division of Research Grants this past year more than 24,000 applications. That's a new high water mark for us.

SGR. Does this reflect more people out there?

Luecke. It reflects more people. There are some people with multiple grants, but that percentage hasn't really increased over the last five years. Within the 24,000 applications, perhaps 25 percent are amended applications. It pays to update an application and resubmit it.

SGR. There are complaints that lengthened award periods and new programs are draining resources away from the traditional investigator-initiated, competitive program.

Luecke. There's been concern expressed about several of the new mechanisms. For instance, the Merit Award, which is used by everyone except the Neurology Institute and the new Institute on Deafness and Communication Disorders. Those awards generally are seven to ten years. In the other two institutes, there are Javits Awards, for seven years. There's been some sense that this is what has really reduced the dollars available for competitive applications in any given year. We need to set the record straight with regard to that. It certainly is true that those awards are for longer

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Tax-Exempts

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fiscal year that ended July 30, 1988. That return, containing some of the plumpest figures in the business, reported a salary of $250,000, plus $25,000 in benefits, for AAMC President Robert Petersdorf. AAMC Executive Vice President John Sherman received a salary of $162,000, plus benefits.—DSG

. . . A Record Number of Grants Awarded Last Year

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periods of time. But the regular grant awards have changed dramatically in the last five years with regard to the years of support. In 1985, about 20 percent of the awards were for five years or more. Last year, just with regard to R01s [the standard NIH award for investigator-initiated research], the percentage was nearly one half. If you look at all the research-project grants, about 56 percent are for five years or more. It's unfair to say that either the Merit Awards or the Javits Awards or the first awards, which are five-year awards [for previously unsupported researchers] have accounted for all of that. Actually, the Merit Awards account for about four percent of the applications and about six percent of the money.

SGR. *In numbers of awards, what's been happening?*

Luecke. In fiscal 1989, we funded more research grant applications than ever before—more than 20,000 [20,694 in 1989; 20,413 in 1988]. But the part that is very dramatic is that the amount of money available for competing applications has been in a continuous drop. Let me explain. If a research grant application is funded—let's say for five years—in its first year, it's a competing application; in the remaining four years, it's what we call non-competing. The number of new competing grants that have been funded has dropped in each year for some time now. Since 1985, it has gone down by almost 900—that is, almost 900 less now for competings, not for totals.

SGR. *What's the significance of the change?*

Luecke. The longer grant periods reflect the feeling that creativity is hampered if a person is given a very short time interval between the beginning of funding and the time when the competing application has to come back in. There's been a dramatic change since 1985 with regard to that, because the number of five-year awards, or greater, has gone from about 20 percent of the total in 1985 to where now about 55 or 56 percent of the applications that are funded are for five years.

SGR. *What's happened to the relationship between the sum requested and the sum awarded?*

Luecke. There are two places in which reductions can occur. The first one is in the initial review, that is, by the study section. The study section members are very experienced people, most of them having ongoing research themselves supported by NIH and others. They will look at and make some value judgments with regard to the number of people that might be regarded in that venture, the number of technicians, the kind of equipment. If the investigator seems to be asking for something that's state-of-the-art and it's not needed for that particular thing, they might make recommendations that would reduce that.

After that, it has not been unusual for the institutes to be required at the time of award to make further reductions because of budgetary limitations. There have been a lot of concerns about how much you can really reduce something beyond that initially recommended and still be able to carry out that research project. I've heard it expressed a number of times that once you go beyond 10 or 15 percent additional reduction from the study section recommendation, that you really don't have the same research project.

The fact that we are now paying the very, very most excellent applications tends to give us less savings with regard to the recommendations by the study section members. We've noticed over time, even going back 10 or 15 years, that those applications which did best in the initial review were cut less than those which did less well. That may reflect the experience of the investigative team, just the way they've put things together. Their requests appear to be more reasonable with regard to what they're proposing to do.

SGR. *Is an applicant free to ask for as much salary as is desired up to the Congressionally mandated $120,000 cap? Can a university faculty member who is devoting fulltime to research have 100 percent of salary paid from an NIH grant?*

Luecke. In some institutions that can happen. That's up to university policy. There are people in research positions that are dependent upon some outside source for 100 percent of their income. Therefore they are able to devote 100 percent of their time. We ask our study section members to look whether the percentage effort on the part of the applicant is reasonable. If it seems to be high, it's within their prerogative to reduce the percent effort. It's not within their prerogative to say we'll only pay Dr. So and So X number of dollars to do the work. That's dependent upon his salary level at the university and the percent devoted to the research supported by NIH.

This year we have the new wrinkle: Even if someone spends 50 percent of their time on an application and might make a salary of $200,000 or more, the NIH share of that salary will be limited to 50 percent of $120,000. One of the problems that has been expressed in many places, including by study section members, is that when the institutes find it necessary to move to reduce the size of grant awards, sometimes the effect on the project is disproportionate. Universities often see themselves needing to protect the salaries of individuals, so that what might be a 10 percent reduction turns out with regard to equipment and supplies to be more than 10 percent, because it affects that grant disproportionately in those categories.

SGR. *Has the salary cap actually affected many people?*

Luecke. We looked at a random sample of applicants last year and we found some who were making in excess of $120,000 or its equivalent for that percent effort. It's estimated that there may be as much as a $10 million saving from the application of the rule.

SGR. *There's always been concern about how younger scientists are faring for support in the competitive system.*

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. . . Efforts to Bring New Scientists into the System

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Luecke. Several years ago, we started at each of the institutes a new award, called the First Award, and it has been extremely successful. It appeals to the person who has never held an NIH research grant before. This might mean someone who's within five or six years of having completed a postdoctoral period. The only absolute limitation is that the applicant was not previously a principal investigator on an award. It's a significant award, because the dollars were raised to something that allows some research to be done—an average of $70,000 in direct costs a year. And it is a five-year award, which is critically important for a young investigator. If you were required at 18 months to begin writing a renewal application, it would be difficult to show much progress.

SGR. *Do these applications receive special handling by the study section?*

Luecke. They are identified as first awards, R29, as distinguished from the traditional investigator research award, the R01. They go to the regular study sections. The reviewers recognize the applicant as a candidate for a first award. The applicants are asked to send in letters of reference, because in lieu of a track record in research productivity, it's helpful to have comments from senior people in the field.

SGR. *What's the success rate with the beginner awards?*

Luecke. To examine that, it should first be noted that the most successful group of applicants are those who have already had research grants from the NIH. They stand about a one in two chance of getting support. That's not true for the first-time applicant. That number has never been that high, and it stands to reason. These are people who may be less experienced. They may also be in that group of people who have tried unsuccessfully over repeated times to get NIH support. What we should compare the first-time applicant, the R-29s, with is the group of people who are putting in a non-renewal R01. The success rate in 1988 for the first-time R01 applicant or previously unsuccessful applicant was 25.4 percent. For the first-time applicant, the R-29, the success rate was 32.4 percent. This reflects some sense of enthusiasm in the community for giving younger people a real chance at research.

SGR. *But the younger applicants still are not faring well compared to people who are already in the system.*

Luecke. We'll have to see. Most of them are into their first, second or third year now under this new type of grant. They have not submitted a competing renewal application. One of things we knew from the predecessor system, the New Investigator Research Award, which was a three-year award, was that many of those people didn't fare too well in their competitive renewal application. It was felt that three years really wasn't long enough for people to get established. The question is still out there on how will these people do with regard to that transition from the R29 grant to their first R01 grant.

SGR. *Is $70,000 a year the ceiling on these awards?*

Luecke. It's an average and it's not to exceed $350,000 over five years. In the first year, with equipment costs and so on, you might spend $100,000. But then it would have to drop below $70,000.

SGR. *What's the average size of the competing grants?*

Luecke. The R01s are in the neighborhood of $200,000.

SGR. *Seventy thousand a year won't buy much science.*

Luecke. That's what we hear from some people. There are certain areas of science where there are real problems in sticking to that kind of a limit. On the other hand, if we didn't set a limit, it's conceivable that the enthusiasm that reviewers might have for a particular application might diminish somewhat if, in fact, it looked as though it was a rather large effort. I think people are encouraged to start rather small. We do have an escape from that. We have said that if first-time applicants need more than what that award will provide, they are welcome to file an R01 application and to state very fully up front that this is their first application. Some people have been successful in doing that.

SGR. *But it must be rather rare for a beginner to expose himself in that way.*

Luecke. It is. And I suspect that the success that we've reported with the first awards may make people think twice about coming in for something larger.

SGR. *What proportion of extramural funds go into indirect costs?*

Luecke. The average is about 30 percent.

SGR. *A study section doesn't take indirect costs into consideration. It's none of it's business.*

Luecke. They may be aware of it, but it's not something they use in assessing technical merit.

SGR. *How does the AIDS program figure in the study section system?*

Luecke. There are monies that have been given by the Congress to NIH specifically earmarked for AIDS. That's impacted dramatically on the National Institute for Allergy and Infectious Diseases and the National Cancer Institute, but there are others, too. There has been a need with AIDS to expedite the review, so that instead of taking 10 to 11 months as the average between submission and award, the AIDS applicant can look forward to something in the neighborhood of six months. With regard to who does the reviews, the Division of Research Grants continues to do the investigator-initiated grant applications whether they're for AIDS or anything else.

SGR. *Recruitment of members for study sections is said to have become more difficult in recent years.*

Luecke. In some categories, it's become increasingly more difficult to recruit. A small number of people say that my grant application needs to go to that study section and as a reviewer on that study section, my application can't go there; it puts me in jeopardy—and no, thank you. That's not

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More In Print: Health, Transportation, Information

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National Center for Health Services Research: Publications in Print, 1989 (16 pp., no charge), lists some 180 publications issued by the federal agency responsible for assessing the effectiveness and economics of medical services and technologies, along with instructions for ordering copies. Topic categories include: AIDS, long-term care, research methods and models, and service delivery, access, and utilization.

Order from: National Center for Health Services Research, Publications and Information Branch, R. 18-12, Fishers Lane, Rockville, Md. 20857; tel. 301/443-4100.

Transportation Research Board (TRB): Publications Catalog, January 1990 (90 pp., no charge), lists publications of the TRB, one of the most editorially prolific branches of the National Academy of Sciences. Major modes of transportation are covered and topic categories include: planning and administration, design, materials and construction, maintenance and equipment, operations and safety.

Order from: Transportation Research Board Business Office, 2101 Constitution Ave. NW, Washington, DC 20418; tel. 202/334-3214.

Litigation Under the Federal Freedom of Information Act and Privacy Act (14th edition, 376 pp., $40 for attorneys, government agencies, libraries; $12.50 for tax-exempt organizations, professors, and students), a must for the curious, as well as the litigious, the volume, published by the American Civil Liberties Union, contains contributions by attorneys with extensive experience in application of the two statutes. Topics covered include materials available under and protected by the laws, fees and waivers of fees, "diverse uses" of the Freedom of Information Act, trial strategies, etc.

Order from: ACLU, Publications, 122 Maryland Ave. NE, Washington, DC 20002; tel. 202/544-1681.

Job Changes & Appointments

John H. Moore, Deputy Director of the National Science Foundation since 1985, has resigned, effective January 1, and has been appointed Professor of Economics and Director of the George Mason University International Institute, which will be located on the University's new campus in Arlington, Va., a suburb of Washington.

Michael Kenward, Editor of the British weekly *New Scientist* since 1979, has announced his intention to resign in six months and says he will work on books and serve as a consultant.

Jennifer Joy Wilson has been confirmed as Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy Administrator of the National Oceanic and Atmospheric Administration. The first woman to hold a Presidential Appointment at NOAA, she formerly served with EPA.

NIH: Grants

(Continued from Page 6)

been a great problem, though there's a growing awareness among people that they need to pay attention to their own research. We hold to the notion that the great majority of people that we select as reviewers will be senior type people. That used to mean that two-thirds were at the level of full professor. That percentage is probably closer to 50 percent now. One reason is that the number of people we're using has grown. We'll shortly be in the neighborhood of 1500 to 1600 positions on the various study sections.

Another thing is that sometimes people who are very senior and who have other responsibilities have not seen it possible to serve for the four-year period of the appointment. We think it's still a good idea to put people on for a four-year period. It takes a certain amount of time to move in and learn the process of initial review. It also allows us to have one-fourth of those members retiring every year, so that there is continuity.

SGR. Isn't there also a financial burden on the reviewers, since the per diem rate doesn't cover the cost of coming to Washington?

Luecke. They don't get rich. We did raise the honoraria from $100 to $150 a day. The sections meet three times a year, generally for three days each time, sometimes longer. For expenses, they're paid around $100 a day. They may have to dip into the honoraria for expenses. There's nothing glorious about it. They travel like government employes.

SGR Holiday Schedule

The next issue of *Science & Government Report* will be published January 15, 1990.

In Print: Science Education, Biology, Swiss R&D

The publications listed are obtainable as indicated—not from SGR.

Formula for Reform: The Role of the Comprehensive University in Undergraduate Science Education (82 pp., no charge), by the American Association of State Colleges and Universities, Washington-based lobby for over 370 universities, recounts the usual laments about the derelict condition of science education, and calls for a doubling of the budget of NSF (which financed assorted activities underpinning the report). Also recommended: "equity" in NSF's research and education spending, now heavily lopsided to the former, and geographical share-the-wealth policies in federal support. The report includes brief descriptions of science-education activities at some 200 universities, along with names of persons to contact for additional information, addresses, and telephone numbers.

Order from: American Association of State Colleges and Universities, One Du Pont Circle, Suite 700, Washington, DC 20036; tel. 202/293-7070.

Opportunities in Biology (448 pp., $42.50), by the National Academy of Sciences Committee on Research Opportunities in Biology, chaired by Peter H. Raven, Director of the Missouri Botanical Garden. The Academy's first big review of biology since 1970, the report covers the major sectors and makes a strong appeal for increased federal funding to invigorate the sagging grant economy and especially to encourage new recruits into the field. The report is devoid of reference to the great dis-opportunity in contemporary biology—the rampaging right-to-lifers who have taken control of the Department of Health and Human Services, including NIH, to the detriment of reproductive- and fetal-tissue research, morale and recruitment.

Order from: National Academy Press, 2101 Constitution Ave. NW, Washington, DC 20418; tel. 1-800/624-6242 (In Washington, DC: 334-3313).

Reviews of National Science Policy: Switzerland (OECD No. 92 89 05 1, 143 pp., $21), latest in the country-by-country series by the Organization for Economic Cooperation and Development (OECD), provides data and analysis on R&D spending, related educational activities and international ties, etc. The report notes that Switzerland is proportionately a world-leading spender on R&D, with 2.89 percent of gross domestic expenditure going to those activities, a touch ahead of the US, Japan, and Germany, and just behind Sweden. Switzerland sharply differs from the pack, however, in the high proportion of R&D financed by industry, 79 percent, as compared with 47 percent for the US, 69 for Japan, and 63 for Germany and Sweden. A paraphrase of concluding comments by Robert Chabbal, head of the OECD Science and Technology Directorate, diplomatically observes that Switzerland remains a loner in a world that is amalgamating into various blocs: "Confronting a European Community now rapidly taking shape, the tighter links between the United States and Canada, and an emerging Pacific Zone, it was becoming difficult to maintain an isolated or different position."

Previously published Reviews of National Science Policy listed as available: ***Austria*** (1988; 92 88 05 2; 122 pp., $15.50); ***Denmark*** (1988; 92 88 02 1; 118 pp., $19.80); ***Finland*** (1987; 92 87 02 2; 154 pp., $19); ***Netherlands*** (1987; 92 87 03 1; 142 pp., $20); ***Sweden*** (1987; 92 87 04 1; 122 pp., $13).

Order from: OECD Publications and Information Center, 2001 L St. NW, Suite 700, Washington, DC 20036-4095; tel. 202/785-6323. Also available at bookshops and OECD offices in major cities throughout the world.

Assessment of Diagnostic Technology in Health Care: Rationale, Methods, Problems, and Directions (143 pp., no charge), from the Council on Health Care Technology, part of the Institute of Medicine, of the National Academy of Sciences, by Herbert L. Abrams, Professor of Radiology, Douglas Owens, Assistant Professor of Medicine, and Susan Stern, a medical student, all at Stanford School of Medicine, and Harold Sox, Chairman, Department of Medicine, Dartmouth. Described in an introduction by co-author Abrams as "Meant more as a primer than as an exhaustive treatment of the subject," the report asserts that diagnostic technologies have rapidly spread without reliable assessment of technical merit and economic value. Among the proposed remedies: a "multi-center consortium," with diverse funding, to conduct assessments and distribute the findings.

Order from: Council on Health Care Technology, IOM--2133, R. 218, 2101 Constitution Ave. NW, Washington, DC 20418; tel. 202/334-2319.

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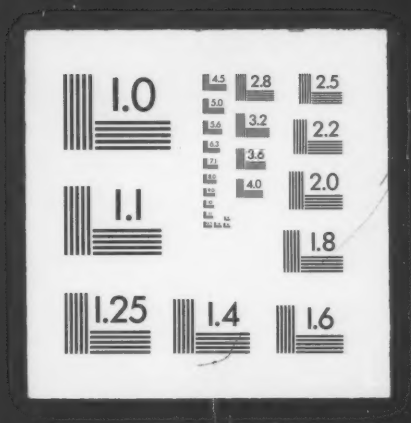
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